



Naval Medical Center Portsmouth

Pediatric Residency
Training Program
2006-2007





General Information

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Residency:

- Founded in 1949 with 222 graduates as of July 2005.
- Fully accredited by the Pediatric Residency Review (RRC) Committee in March 2001 with five-year accreditation and no citations.
- 97% board pass rate over 22 years. 100% over the past three years (2003- 2005) places program in top 5% of US/Canada. Scores well above national average.
- RRC-approved for 8 residents per year. Resident complement for 2006 is 10/8/7 (PL1/2/3).
- Currently training 11 AF/ 14 Navy Pediatric Residents.

Demographics:

- Largest eligible Department of Defense (DoD) dependent population in the world - 135,000 in the market service area
- Approximately 70% Navy, 20% Air Force, and 10% Army
- Largest enrolled pediatric population in DoD - 89,609

Clinical Services:

- Busiest pediatric clinical services in DoD - 288,591 total encounters in 2005.
 - Highest delivery rate 350-400 newborns per month
 - Busiest emergency department - 23,949 visits per year
 - Busiest pediatric subspecialty service - 19,686 visits per year.
 - Average daily NICU census of 21. Highest number of < 1500 gram premies per year 79
 - Average ward daily census of 12
 - Busiest PICU - 330 admissions (2004). - Average PICU census of 4.2
- Most Children's Oncology Group protocol enrollments in DoD - 24 in 2004
- New and comprehensive neurodevelopmental disabilities program with an Autism Diagnostic Center
- Cystic Fibrosis Center
- All rotations available at Naval Medical Center Portsmouth (NMCP) except pediatric emergency medicine which is provided at Children's Hospital of the King's Daughters (CHKD)

Facility and BRAC



Newest, largest and most historic major medical center in the DoD

- Original building constructed in 1830 was newly renovated (2004) and serves as a national historic landmark (Building One).
- New one million square-foot state-of-the-art clinical center opened in 1999 (Building Two).
- Newly renovated (2005) previous clinical center now home to
 - Clinical and administrative spaces
 - State-of-the-art educational classrooms and computer learning centers
 - State-of-the-art gym
 - Exchange, barber and food court



- New dedicated resident workspaces, locker rooms, computers and Graduate Medical Education Center in Building Three
- New simulation center (2005)
- Federal Small Library of the Year (2003)
- No parking problems!

Facility and BRAC

Base Realignment and Closure (BRAC) 2005

- Minor BRAC changes in Hampton Roads will primarily affect Army
 - Realigning Fort Eustis (no inpatient)
 - Closure of Fort Monroe
- NMCP will lose the Naval School of Health Sciences (400+ enlisted)
- Navy and Air Force populations in the region increase
- Net effect is zero on the region's beneficiary population
- No other plans for NMCP facility closures or realignments
- No effect on pediatric residency education
- Combined AirForce/Navy, but await official joint designation.



Quality of Life

Quality of Life

NMCP is located in southeast Virginia on the banks of the Elizabeth River. The historic battleship Wisconsin is in view from the Medical Center, homeported across the river in Norfolk. Several cruise lines have recently begun sailing from this site. Virginia Beach is just a short drive to the east. The region, known as Hampton Roads or Tidewater, is one of the most popular vacation spots on the East Coast.



The history buff can enjoy Williamsburg, Yorktown, and Jamestown, all within a 1-hour drive. Busch Gardens and Water Country USA are both favorite warm weather destinations near Williamsburg. For sports fans,

Hampton Roads boasts minor league baseball and hockey teams, as well as excellent college-level sports. The fine arts are well represented with a symphony, an opera company, multiple theater groups, and a multitude of museums. The area allows for a wide variety of outdoor activities for all



seasons. In the summer, enjoy

world-famous beaches or sail on the Chesapeake Bay. In the fall, take a short drive to the Shenandoah Valley to view the changing foliage. In the winter, snow skiing is only 3 hours away by car. In the spring, visit the Norfolk Botanical Gardens.

Cost of Living



Despite all Hampton Roads has to offer, it is surprisingly affordable. A Cost of living analysis comparing the Washington, DC/Southern Maryland area, San Diego, California, and Hampton Roads shows that, hands down, this is the place to live!

Cost of Living Indexes	National Average	Washington DC	Hampton Roads (SE Virginia)	San Diego
Overall 100= national average (lower = better)	100.0	137.8	100.6	143.1
Housing Comprises 29% of overall COL	100.0	187.8	100.1	214.2
Food and groceries Comprises 14% of overall COL	100.0	121.5	95.7	112.1
Transportation Comprises 10% of overall COL	100.0	118.1	99.5	131.9
Utilities Comprises 10% of overall COL	100.0	114.1	117.8	92.8
Health Comprises 4% of overall COL	100.0	126.7	99.9	110.4
Miscellaneous 33% of overall COL	100.0	113.4	99.0	113.2
Housing	National Average	Washington DC	Hampton Roads (SE Virginia)	San Diego
House purchase cost median value	\$	\$507,011	\$251,454	\$571,403
Average Rent	\$	\$1,232	\$832	\$1,374

Affordable homes with an abundance of good school options are within close driving distance of the hospital. The average commute to work for staff and residents is 20 minutes.

Cost of Living Indexes
Source: ACCRA (2004, Q2)
www.coli.org , October 10, 2004



Cost of Living



Affiliations

Affiliations

Children's Hospital of the King's Daughters (CHKD)

- Sponsored by Eastern Virginia Medical School
- Resident electives in all pediatric subspecialties. Most NMCP pediatric residents do about 3-4 electives at CHKD during their residency
- Combined rotations in pediatric infectious diseases and adolescent medicine in place
- Required pediatric emergency department rotation for PL1 and PL2 years for NMCP pediatric residents



Uniformed University of the Health Sciences, AFHPSP Medical Students

- NMCP Pediatrics provides pediatric clerkships to 3rd and 4th year medical students from USUHS, and the AFHPSP program.
- Many faculty members have teaching faculty appointments at USUHS.

Affiliations



Naval Hospital Camp LeJeune



- Residents from the Camp LeJeune Family Practice program rotate in the NMCP NICU.

Within Naval Medical Center Portsmouth

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- Residents in our institutional obstetrics and gynecology program perform clinical rotations in our NICU.
 - NMCP Emergency department residents rotate in our PICU
 - Transitional and internal medicine interns and osteopathic interns in other specialties do clinical rotations in the General Pediatric Clinic.

Affiliations

Langley Air Force Base - 1st Medical Group (30 miles north of NMCP)

- PL3 outpatient rotation for residents in place
- Proposal to expand outpatient training at Langley for any Air Force residents that may begin at NMCP in 2006
- Very strong collaboration between the two medical facilities with the potential and strong desire for joint residency training



Academics and Research

Academics

Residents at NMCP are fortunate to be exposed to such a large and diverse patient population. Our residents are extremely well-prepared for their challenging future assignments because they have “seen it, done it, and taught it” many times during their residency.

However, we also recognize the need for dedicated time to cover the pediatric subject matter in a systematic fashion. These learning experiences are described below:

- Morning report from 0730-0800 all weekdays except Thursday. Interactive case-based discussions about recent admissions. Mandatory attendance.
- Academic Morning every Thursday from 0800-1200. The pediatric core curriculum is presented in a variety of formats (lecture, case discussions, jeopardy, sample board questions, experiential learning, small group discussions). Curriculum derived from Pediatric Review and Education Program (PREP) on an 18-month rotating schedule. Pre-reading of review articles provided for each module. Faculty cover the clinical services. Mandatory attendance.
- Continuity Clinic Curriculum once weekly 30 minutes prior to continuity clinic session. 50 sessions over the year covering the body of general pediatrics. Pre-reading of review articles provided.



- Research is available, but not required, for interested residents. Two faculty members have formal research training (MPH). See list below for projects and recent publications.

Academics and Research



Active Protocols by Current Faculty:

- Biswas AK. "Typanostomy tubes done in the Operating Room vs. Pediatric Intensive Care Unit: Comparison of procedure times and length of stay" Controlled Trial
- Thompson JA. "A Prospective Trial of Methadone for Prevention of Withdrawal in Fentanyl-Tolerant Pediatric ICU Patients", Controlled Randomized Trial
- Meilnicki D, Shope TR, Zabrocki LA. "A Comparative Look at the Use of Safety Net Antibiotic Prescription for Acute Otitis Media between the Emergency Department and Outpatient Pediatric Settings", Prospective Intervention
- Podraza CJ, Gavril AE, Roberts TA. "Pediatric Obesity in the Military Department Population" Chart Review
- Thompson JA, Roberts TA. Potential Side Effects of Arginine Supplementation in a Healthy Adolescent Patient, Case Report
- Sutton JF. Principal Investigator on over 45 active Children's Oncology Group Protocols.
- Shope TR. "Prevalence of Corneal Abrasions in Children Under Two Months Old seen in the General Pediatrics Clinic"

Books and Chapters/ Letters and Review Articles:

- Fleenor JT. Atrial Septal Defects. In: 5 Minute Pediatric Consult, 4th edition, Philadelphia: Lipponcott, Williams and Wilkins, 2005.
- R. L. Lee. Non-obstructive sleep patterns in children. In: Pediatric Sleep Disorder, M. Richardson and N. Friedman, eds. Marcel Dekker, Inc., 2006.
- Meyer GA, Fragile X Syndrome and X-Linked Mental Retardation Syndromes. In Children with Disabilities, 6th Edition. Batshaw, Mark L. Ed. Paul Brooks Publishing, 2007
- Scouten WT, Francis, GL. Thyroid Cancer And The Immune System: A Model For Effective Immune Surveillance. Expert Review Of Endocrinology And Metabolism. 2006 (Manuscript with Editor).
- Shope TR, Aronson SS, eds. Managing Infectious Diseases in Child Care and School: A Quick Reference Guide. American Academy of Pediatrics. October, 2004.
- Biswas AK, Summerauer JF. Heart rate variability and brain death. Journal of Neurosurgical Anesthesiology. 2004;16(1):62
- Biswas AK, Fruedenthal WC. Levalbuterol toxicity: no reason to be jittery. European Respiratory Journal. 21(6):1081, 2003 Jun.
- Biswas AK, Sommerauer JF. Low-frequency/high-frequency ratio and functional outcome. Critical Care Medicine. 31(1):335, 2003 Jan.
- Miller JR, Emmons WE. Morganella Infections. eMedicine Journal, June 2005. [Http://www.emedicine.com/med/topic1502.htm](http://www.emedicine.com/med/topic1502.htm)
- Shope TR, Aronson SS. Improving the Health and Safety of Children in Non-Parental Early Education and Child Care. Pediatrics in Review. 2005;26:86-94.

Research



Academics and Research

Publications in Peer Reviewed Journals By Residents and Staff (2003-2006) :

Biswas AK. Feldman BL. Davis DH. Zintz EA. **Myocardial ischemia as a result of severe benzodiazepine and opioid withdrawal.** Clinical Toxicology. 2005;43(3):207-9.

Biswas AK. Zabrocki LA. Mayes KL. Morris-Kukoski CL. **Cardiotoxicity associated with intentional ziprasidone and bupropion overdose.** Journal of Toxicology - Clinical Toxicology. 2003;41(2):101-4.

Waters ET. Oberman JP. Biswas AK. **Pierre Robin sequence and double aortic arch: a case report.** International Journal of Pediatric Otorhinolaryngology. 2005;69(1):105-10.

Fleenor JT. Weinberg P. Kramer S. Fogel M. **Vascular rings and their effect on tracheal geometry.** Pediatr Cardiol 2003;24:430-435. Mastropietro C. Morris M. Stanfield R.

Stallworth JR. Caro ST. Fleenor JT. **Case report: 4 yo presenting with Truncus Arteriosus.** Pediatrics in Review. 2005;26(3).

Freier G. Wright A. Nelson G. et.al. **Contact Investigation for Multi-Drug Resistant Tuberculosis in a Military Recruit Population.** Emerging Infectious Disease Journal. In Press

Grabill C. Silva AC. Smith SS. Koretsky AP. Rouault TA. **MRI detection of ferritin iron overload and associated neuronal pathology in iron regulatory protein-2 knockout mice.** Brain Research. 2003;971(1):95-106,

Winter LW. Giuseppetti M. Breuer CK. **A case report of midgut atresia and spontaneous closure of gastroschisis.** Pediatric Surgery International. 2005;21(5):415-6. Neurology. 59(4):490-8, 2002 Aug 27

Holston AM, Miller JR. **Primary Lung Abscess Caused by Multidrug-nonsusceptible Streptococcus pneumoniae in a Child.** Pediatric Infectious Disease Journal, 2006 Feb;25(2):182-3.

Bird DN, Sato AK, Knee DS, Uyehara CF, Person DA, Claybaugh JR. **Effects of prenatal ethanol exposure and gender on the arginine vasopressin response to hemorrhage in the rat.** American Journal of Physiology Regul Integr Comp Physiol. 2006 Feb 9; (Epub ahead of print)

Knee DS. Sato AK. Uyehara CF. Claybaugh JR. **Prenatal exposure to ethanol causes partial diabetes insipidus in adult rats.** American Journal of Physiology - Regulatory Integrative & Comparative Physiology. 2004;287(2):R277-83.

Academics and Research



Knee DS. Christ MJ. Gries DM. Thompson MW. Actinomyces species and cerclage placement in neonatal sepsis: a case report. Journal of Perinatology. 2004;24(6):389-91.

Lee RL. Rancourt RC. Del Val G. et al. Thioredoxin and dihydrolipoic acid inhibit elastase activity in cystic fibrosis sputum. American Journal of Physiology. 2005;289(5):L875-82.

Patel A. Pluim T. Helms A. et al. Enzyme expression profiles suggest the novel tumor-activated fluoropyrimidine carbamate capecitabine (Xeloda) might be effective against papillary thyroid cancers of children and young adults. Cancer Chemotherapy & Pharmacology. 2004;53(5):409-14.

Roberts TA. Auinger P. Klein JD. Predictors of Partner Abuse in a Nationally Representative Sample of Adolescents Involved in Heterosexual Dating Relationships. Violence and Victims. 2006;21(1)81-9.

Roberts TA. Auinger P. Klein JD. Intimate partner abuse and the reproductive health of sexually active female adolescents. Journal of Adolescent Health. 2005;36(5):380-5.

Cerel J. Roberts TA. Nilsen WJ. Peer suicidal behavior and adolescent risk behavior. Journal of Nervous & Mental Disease. 2005;193(4):237-43.

Cerel J. Roberts TA. Suicidal behavior in the family and adolescent risk behavior. Journal of Adolescent Health. 2005;36(4):352.e9-16.

Roberts TA. Auinger P. Ryan SA. Body Piercing and High-Risk Behavior in Adolescents. Journal Adolescent Health. 2004;34:224-229.

Roberts TA, Klein JD, Fisher S. Longitudinal Effect of Intimate Partner Abuse on High-Risk Behavior Among Adolescents. Archives of Pediatrics and Adolescent Medicine 2003;157:875-881.

Roberts TA, Glen J, Kreipe RE. Disordered Eating and Menstrual Dysfunction in Adolescent Female Athletes Participating in School-Sponsored Sports. Clinical Pediatrics. 2003;42:561-564.

Roberts TA, Klein JD. Intimate Partner Abuse and High-Risk Behavior Among Adolescents. Archives of Pediatrics and Adolescent Medicine. 2003;157:375-380

Scouten WT. Patel A. Terrell R. et al. Cytoplasmic localization of the paired box gene, Pax-8, is found in pediatric thyroid cancer and may be associated with a greater risk of recurrence. Thyroid. 2004;14(12):1037-46.

Copeland K, Duggan AK, Shope TR. Knowledge and beliefs about guidelines for exclusion of ill children from child care. Ambulatory Pediatrics. 2005;5:365-71.

Serwint JR, Thoma KA, Dabrow SM, Hunt LE, Barratt MS, Shope TR, Darden PM for the CORNET Investigators, Ambulatory Pediatric Association, McLean, VA, and Department of Practice and Research, Center for Child Health Research, American Academy of Pediatrics, Elk Grove Village, IL. [Comparing Patients Seen in Pediatric Resident Continuity Clinics and the National Ambulatory Medical Care Survey \(NAMCS\): A Study from the CORNET Network.](#) Accepted to Pediatrics.

Shen Y, Leatherbury L, Rosenthal J, Yu Q, Pappas MA, Wessels A, Lucas J, Siegfried B, Chatterjee B, Svenson K, Lo CW. [Cardiovascular phenotyping of fetal mice by noninvasive high-frequency ultrasound facilitates recovery of ENU-induced mutations causing congenital cardiac and extracardiac defects.](#) Physiol Genomics. 2005;24(1):23-36.

Yu Q, Shen Y, Chatterjee B, Siegfried BH, et al. [ENU induced mutations causing congenital cardiovascular anomalies.](#) Development. 2004;131(24):6211-23.

Kearns WG, Sutton JF, Maciejewski JP, Et al. [Genomic instability in bone marrow failure syndromes.](#) American Journal of Hematology. 2004;76(3):220-4.

Sutton JF, Stacey M, Kearns WG, et al. [Increased risk for aplastic anemia and myelodysplastic syndrome in individuals lacking glutathione S-transferase genes.](#) Pediatric Blood & Cancer. 2004;42(2):122-6.

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<http://www-nmcp.mar.med.navy.mil/Pediatrics/residenc.asp>



Annual Rafting Trip



Annual Softball Game and Picnic